



The Status of Geologic and Geomorphic Mapping in Florida

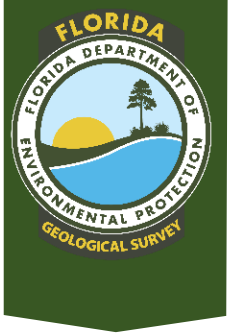
Guy "Harley" Means
P.G. Administrator
Assistant State Geologist
Florida Geological Survey



Geologic Mapping

History

- The Florida Geological Survey has been collecting, interpreting and disseminating geologic information since 1907.
- The first statewide surficial geologic map of Florida was published by the FGS in 1909.
- Since then, updated and revised statewide surficial geologic maps were published in 1922, 1945, 1959, 1965 and most recently in 2001.
- Geologic maps are revised, updated and published periodically as new data are acquired that increase our understanding of the geology of Florida.



Walter Schmidt
State Geologist and Chief



David B. Struhs, Secretary

Geologic Map of the State of Florida

by
Thomas M. Scott, P.G.#69, Kenneth M. Campbell, Frank R. Rupert,
Jonathan D. Arthur, Richard C. Green, Guy H. Means, Thomas M. Missimer,
Jacqueline M. Lloyd, J. William Yon and Joel G. Duncan
2001

(Revised - April 15, 2006 by David Anderson)

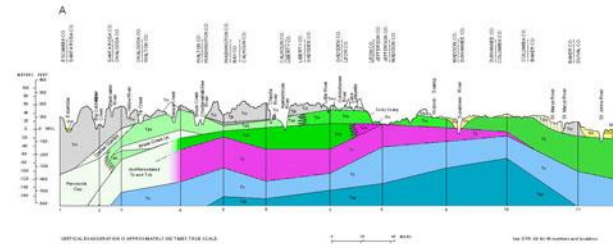


- Geologic Map of Florida (Scott et al., 2001).
- 1:1,000,000 scale.

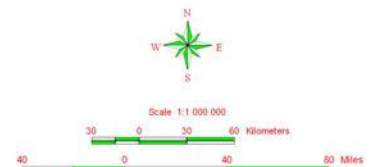
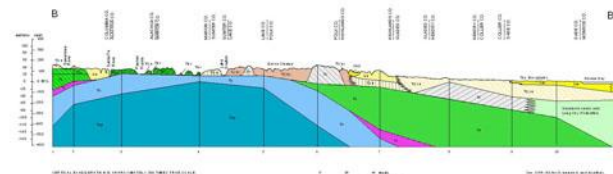
LITHOSTRATIGRAPHIC UNITS



CROSS SECTION A - A'



CROSS SECTION B - B'





Geologic Mapping

Florida Surficial Geologic Mapping Project

- Goal: complete a revised statewide surficial geologic map by 2025.

Two teams of mappers will consist of STATEMAP mapping team and another team comprised of other FGS geologists who will dedicate some of their time to mapping.

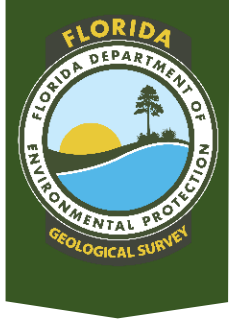


Geologic Mapping

STATEMAP

- STATEMAP is partially funded (50:50 match) through the US Geological Survey and is part of the National Cooperative Geologic Mapping Program established in 1992 by the passing of the National Geologic Mapping Act by Congress.
- The FGS has received funding for surficial geologic mapping through this program since 1994.
- STATEMAP produces a surficial geologic map, at 1:100,000 scale, each year as a deliverable.
- To date, STATEMAP has mapped approximately 50% of the state.
- Download maps and get more information at:

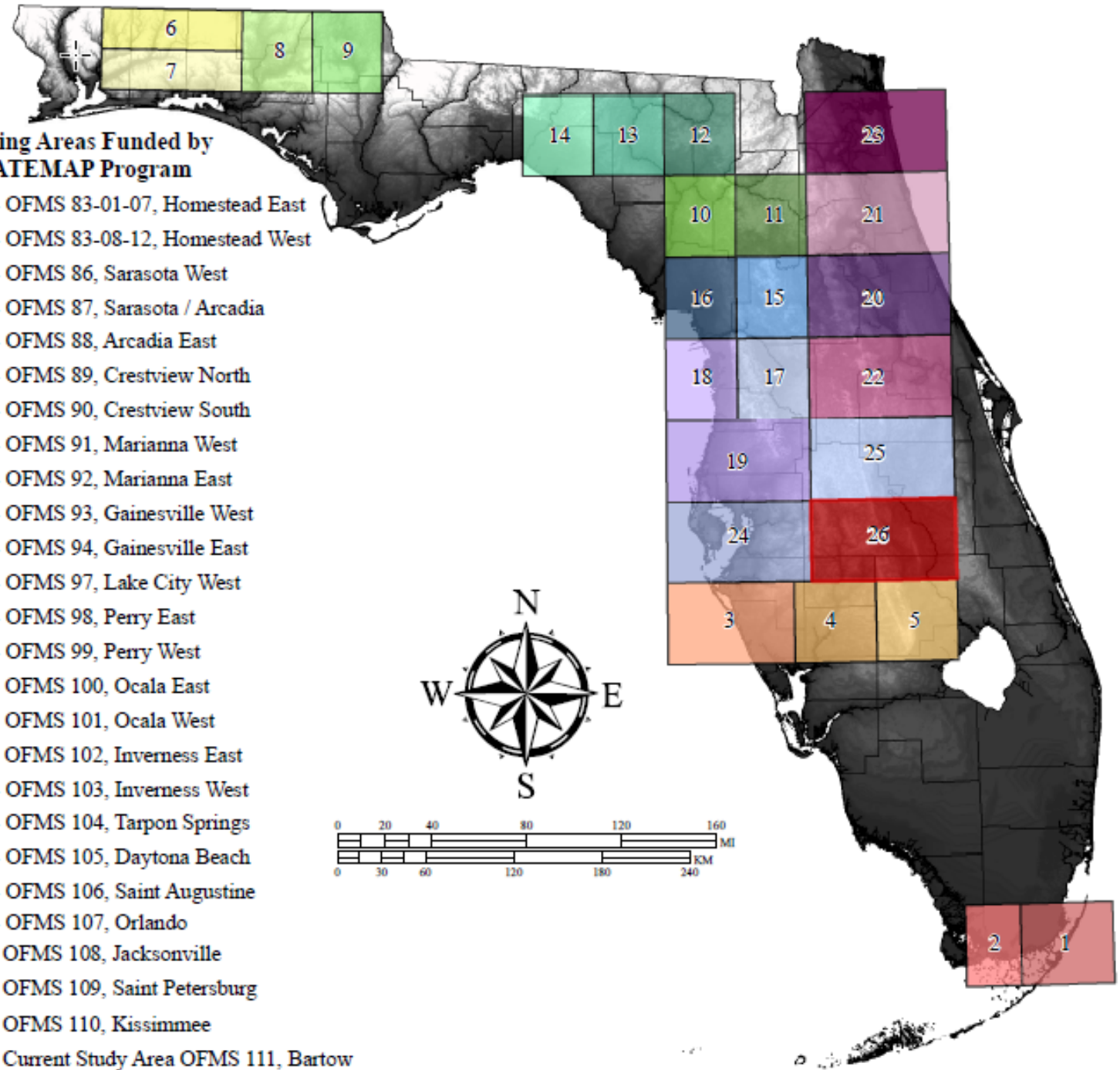
<https://floridadep.gov/fgs/research/content/statemap>

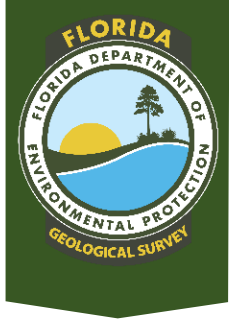


- Shaded areas have already been mapped by STATEMAP team.

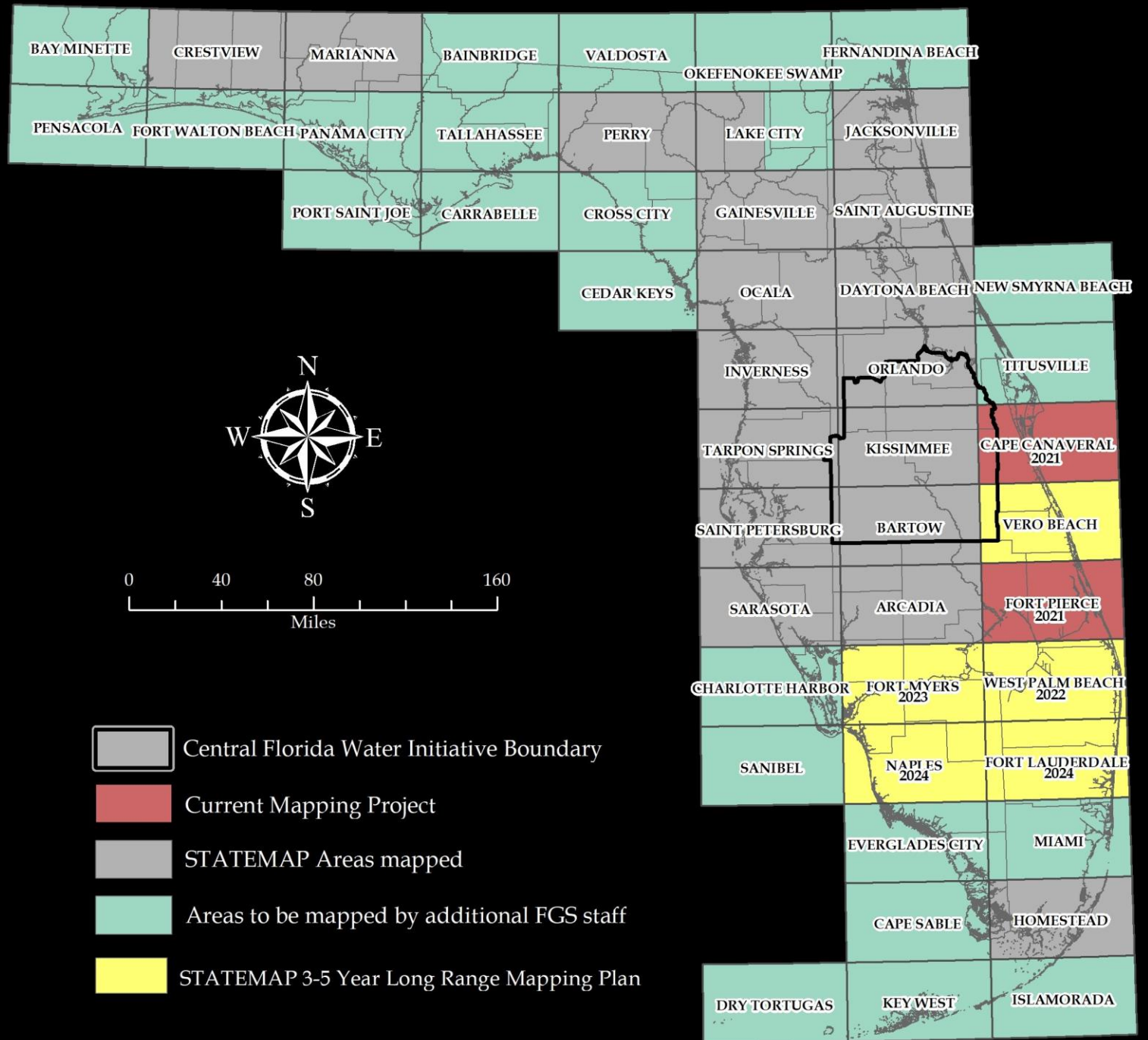
Mapping Areas Funded by STATEMAP Program

1	1995 - OFMS 83-01-07, Homestead East
2	1996 - OFMS 83-08-12, Homestead West
3	1997 - OFMS 86, Sarasota West
4	1998 - OFMS 87, Sarasota / Arcadia
5	1999 - OFMS 88, Arcadia East
6	2000 - OFMS 89, Crestview North
7	2001 - OFMS 90, Crestview South
8	2002 - OFMS 91, Marianna West
9	2003 - OFMS 92, Marianna East
10	2004 - OFMS 93, Gainesville West
11	2005 - OFMS 94, Gainesville East
12	2006 - OFMS 97, Lake City West
13	2007 - OFMS 98, Perry East
14	2008 - OFMS 99, Perry West
15	2009 - OFMS 100, Ocala East
16	2010 - OFMS 101, Ocala West
17	2011 - OFMS 102, Inverness East
18	2012 - OFMS 103, Inverness West
19	2012 - OFMS 104, Tarpon Springs
20	2013 - OFMS 105, Daytona Beach
21	2014 - OFMS 106, Saint Augustine
22	2015 - OFMS 107, Orlando
23	2016 - OFMS 108, Jacksonville
24	2017 - OFMS 109, Saint Petersburg
25	2018 - OFMS 110, Kissimmee
26	2019 - Current Study Area OFMS 111, Bartow





- Provided STATEMAP funding continues, mapping will proceed as outlined in this graphic.
- Areas outside of STATEMAP study areas will be mapped by other FGS geologists.
- Areas will be combined to create the updated map in 2025.





Geomorphic Mapping

History

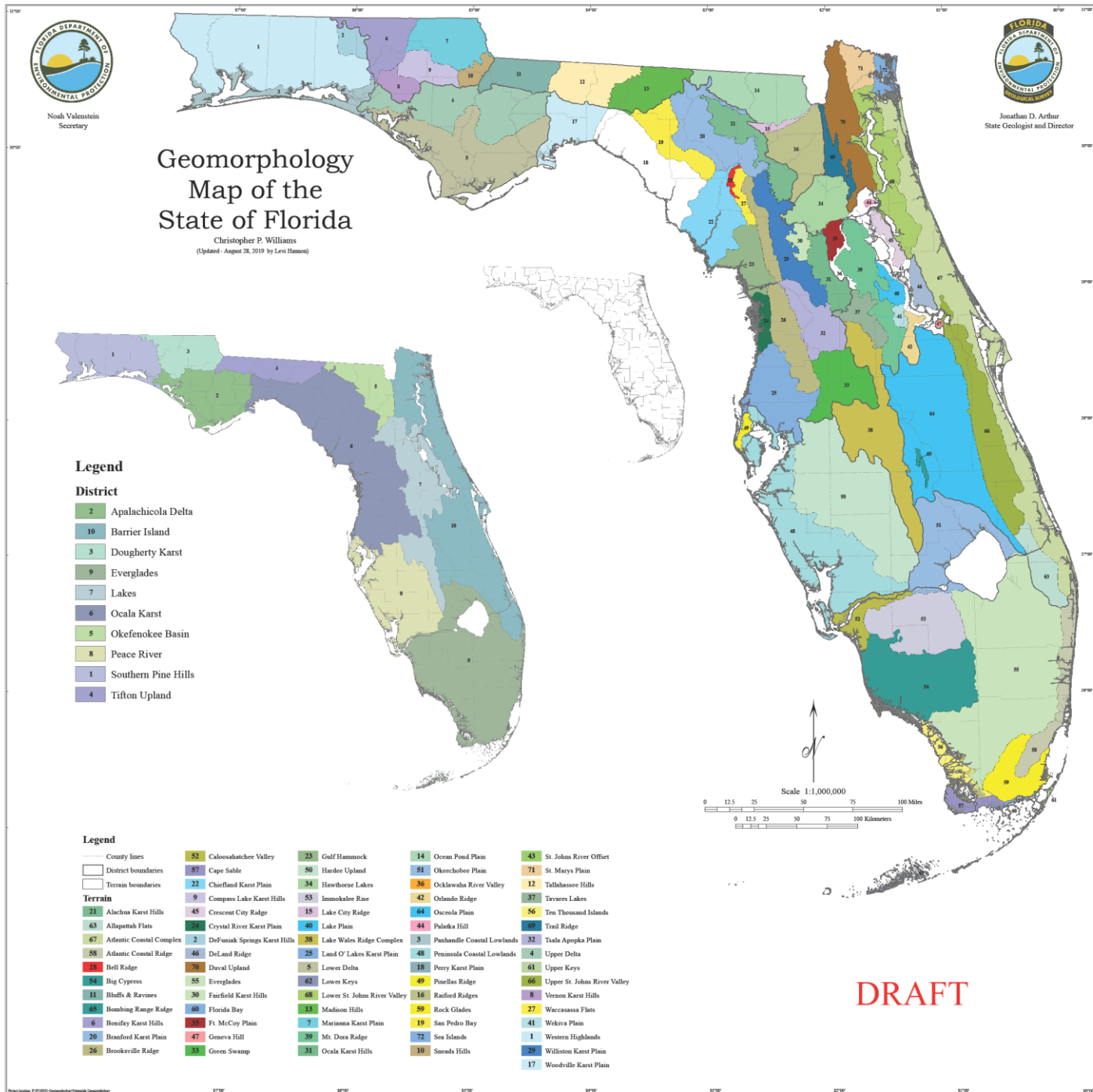
- Geomorphic maps show the distribution of landforms (hills, dunes, sinkholes, etc.).
- The FGS has published geomorphic maps and described the physiography of various parts of the state in many reports and publications (Vernon, 1942; White, 1958; White, 1970).
- More information at: <https://floridadep.gov/fgs/research/content/geologic-mapping>



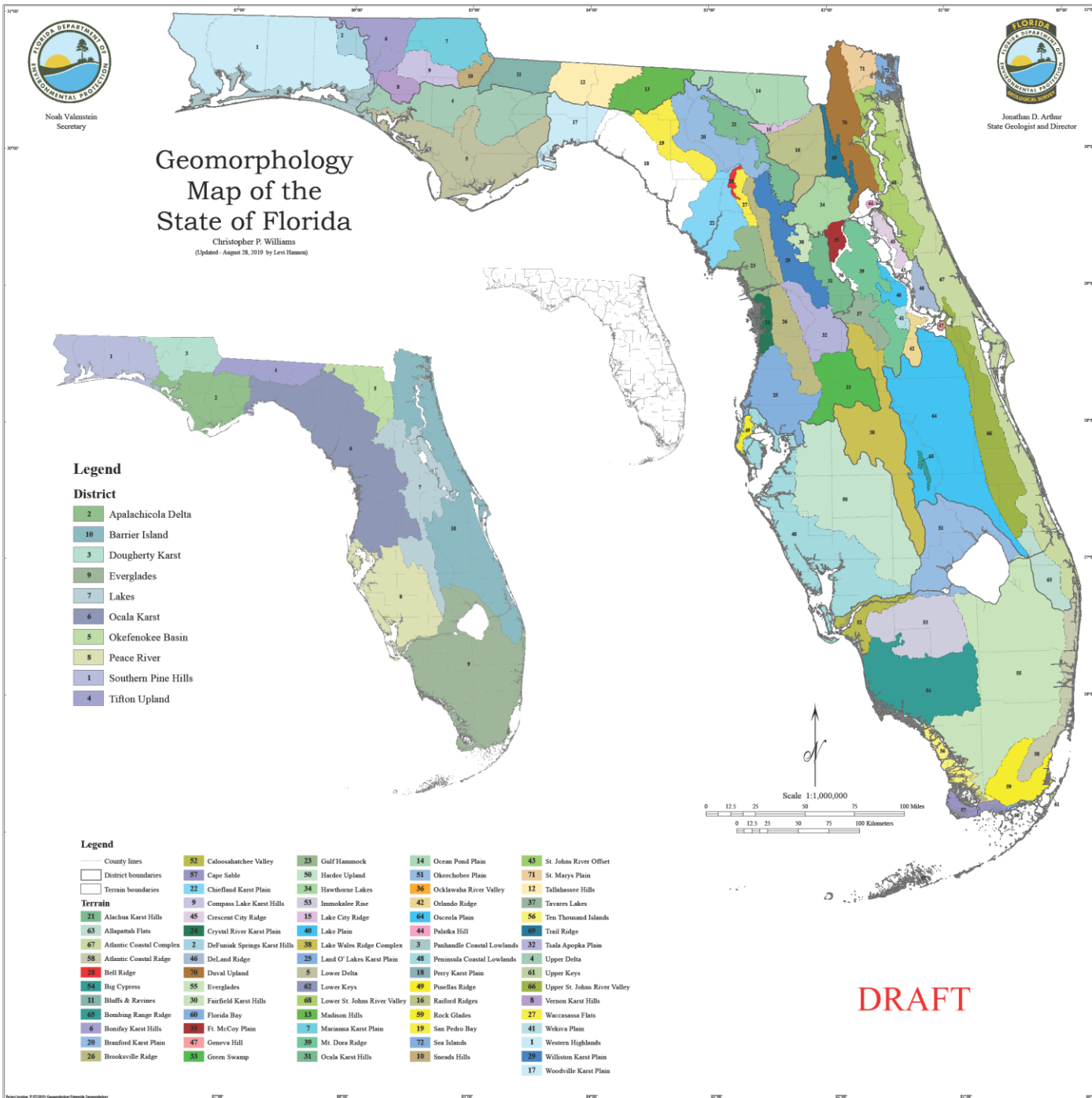
Geomorphic Mapping

Statewide geomorphic map of Florida

- Goal: complete a digital atlas of Florida's geomorphic units by 2020 and publish a comprehensive bulletin on Florida geomorphology once the digital atlas is complete and statewide high resolution LiDAR becomes available.



- New LiDAR elevation models will be utilized to create the map.
- Statewide LiDAR is currently being collected and will provide a seamless, high resolution topographic model for the state.
- Reveals landforms not seen on USGS topographic maps, particularly karst features.



- Florida is divided into geomorphic districts that are further divided into geomorphic provinces.
- Delineation of geomorphic units is based on similarity of landforms, the geomorphic processes leading to their formation, and the underlying geology.



<https://floridadep.gov/fgs>